

4130 R.750

Work Order ID 86727

86727

Page 1

July-06-12 11:45:08 AM

Item ID: D3028-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Stud

Start Date: 7/06/12

Start Qty: 6.00

6

Cust Item ID:

Required Date: 8/10/12

Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan: ✓Date: 12-07-9

Tooling:

Date:

Run Start *NR1*

QC: Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3028	Rev A								

100

0.00

100

Hardinge CNC LATHE SMALL

Hardinge

Memo

0.00

Hardinge CNC Lathe Small

1-Turn blank per Dwg D3028 and FA263

12-8-28 12

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

12-8-28 12

120

0.00

120

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

1-Cut groove as per Dwg D3028 and FA

2-Deburr

12-09-12 (x) 12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

July-06-12 11:45:08 AM

Item ID: D3028-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Stud
 Start Date: 7/06/12 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 8/10/12 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00				<i>DAS</i> <i>02/</i> <i>2-89</i>	<i>12</i>	<i>12-09-12</i>	<i>(12)</i>
140 *140* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	<i>DAS</i> <i>14</i> <i>2-89</i>	<i>12/09/12</i>		<i>12</i>	<i>0</i>		
150 *150* Outsource3 Outsource process - Cad plate	Outsource process-Cadplate per QSI017 4.1.9.1 Memo Issue P/O: <i>17897</i> Finish : Cadmium plate per QQ-P-416F Class I, Type II Material release note is required.	0.00 0.00						<i>H/12-09-12</i>	

D3028-1
B 86727

W/O:		WORK ORDER CHANGES					
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Page 3

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Item ID: D3028-1 Accept ***N900040100*** Setup Start ***NS1***
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 Item Name: Stud
 Start Date: 7/06/12 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 8/10/12 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Receive & Inspect for Damage & Mat'l Certs	0.00							
160									
Packaging	Memo	0.00							
Packaging									
165	QC5- Inspect part completeness to step on W/O	0.00							
165									
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: <u>stay</u>	0.00							
170									
Packaging	Memo	0.00							
Packaging	Ensure Material Release Note is attached Identify and Stock								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 4

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Item ID: D3028-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Stud
 Start Date: 7/06/12 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 8/10/12 Req'd Qty: 6.00 *6* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

MLJ 12-09-20

MF 12-09-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

July-06-12 11:45:08 AM

Page 1

Work Order ID: 86727

Parent Item: D3028-1

Parent Item Name: Stud

Start Date: 7/06/12

Required Date: 8/10/12

Start Qty: 6.00

Required Qty: 6.00

Comments: IPPB02.09.10Made on Cobra KJ
IPP C 08.11.06 Added QC6 KJ

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M4130NR0.750		Purchased	No			110	f	7.0200	0.125	0.7894734			
4130 steel RD bar .750"													

Location

Loc Qty

Loc Code

MAT031

7.02

111823 ✓

7.02

12.8.28
1.4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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DART AEROSPACE LTD		Work Order:	94727
Description: Stud		Part Number:	D3028-1
Inspection Dwg: D3028 Rev: A		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.40	+/-0.030	1.388	/		QA 52	
0.55	+/-0.030	.545	/			
0.110	+/-0.010	.110	/			
0.100	+/-0.010	.094	/			
0.05	+/-0.030	.05	/			
0.025 x 45°	+/-0.010 x 0.5°	.025	/			
R0.060	+/-0.010	.060	/			
0.385	+/-0.010	.386	/			
Ø0.750	+0.000/-0.015	.746	/			
0.10	+/-0.030	.094	/			25-4
MOW	Min: 0.3315 Max: 0.3352	.334	/			
5/16-24 UNF-2A	Min: 0.3042 Max: 0.3114	.310	/			

Measured by: RP / DA 02	Audited by: DAS 14	Prototype Approval:	N/A
Date: 8-8-28	Date: 10/29/12	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.10.17	New Issue	KJ/DD	DA

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

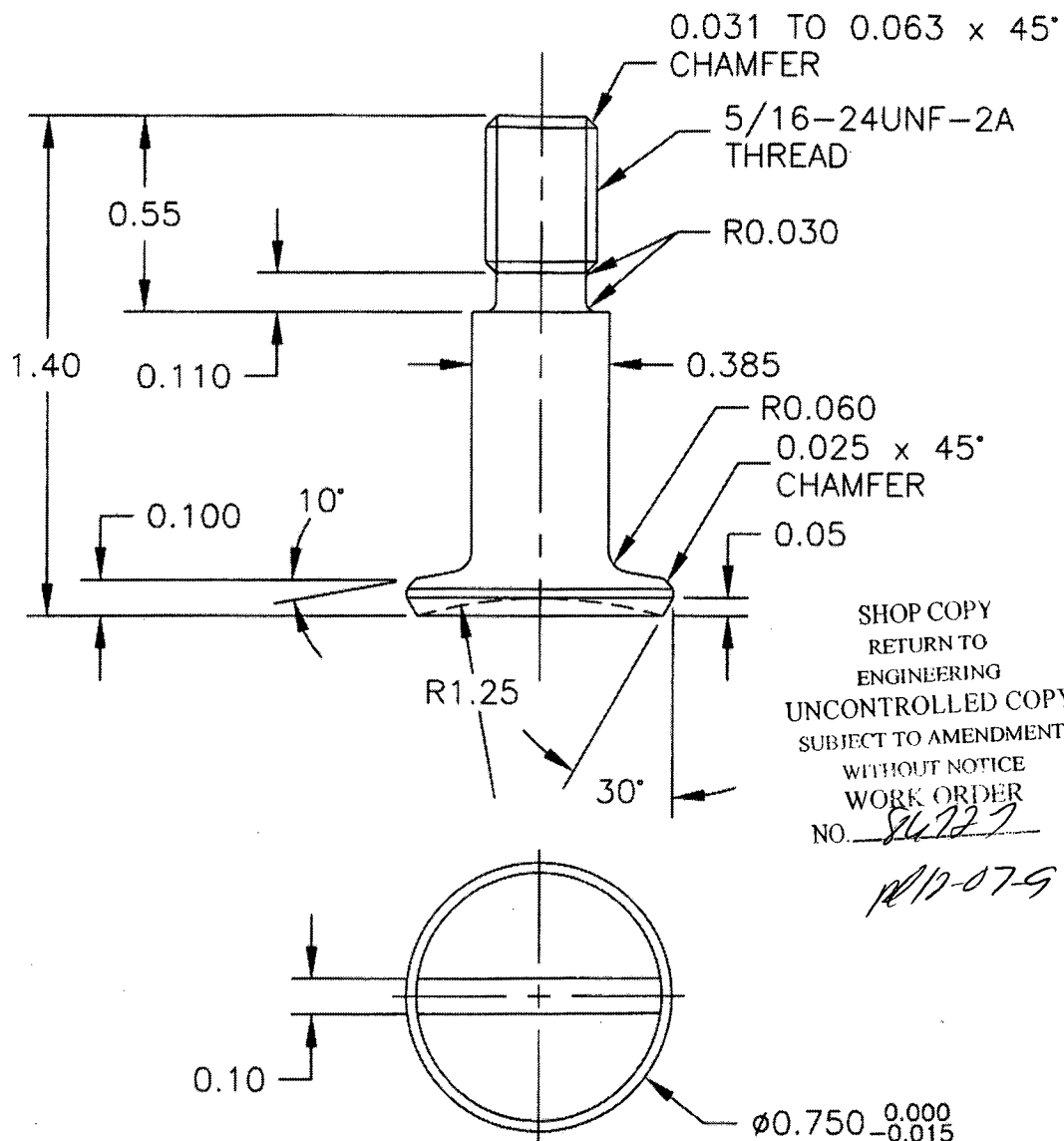
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DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3028	REV. A SHEET 1 OF 1
DATE 01.05.18		TITLE STUD	SCALE 2:1
A	01.05.18	NEW ISSUE	

SPECIFICATION CONTROL DRAWING



D3028-1:

- 1) POSSIBLE SUPPLIER: NORTHERN AERO INDUSTRIES P/N B83602-1
- 2) MATERIAL: AISI 4130N BAR PER MIL-S-6758 OR AMS 6348/6370/6528
- 3) THREADS PER MIL-S-7742
- 4) FINISH: CADMIUM PLATE PER QQ-P-416F CLASS 1, TYPE II
- 5) ALL DIMENSIONS ARE IN INCHES.
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

RELEASED
01.05.30

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17897

Purchase Order Date 9/12/2012

PO Print Date 9/12/2012

Page Number 1 of 1

Order From :

VC-CAD002

CADORATH COATING
2150 LOGAN AVE.
WINNIPEG, MB R2R 0J2
CA

Contact Name

Vendor Phone 204 633 9420

Vendor Fax 204 633 8033

Vendor Account Nbr

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Brigitte Golden

10127-2607

Net 30

CAD

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA



Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	86727	D3028-1 STUD	9/17/2012 Yes	12.00	FedEx PI collect	\$7.0000	\$84.00

Special Inst: CAD PLATE AS PER DWG D3028 REV.A
CADMIUM PLATE AS PER QQ-P-416F
CLASS I, TYPE II

PO Total:

\$84.00



Change Nbr: 1

Change Date: 9/12/2012

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required - YES NO

Packing Slip



Cadorath Coating

2150 Logan Avenue, Winnipeg, Manitoba R2R-0J2

Phone: (204) 633-9420 Fax: (204) 633-8033

INVOICE NUMBER:

S 62389

Net 2% Interest Per Month charged on Overdue Accounts.

Any claims for shortages, overcharges, or damaged goods must be made within seven (7) days from receipt of goods.

Sold To:

Dart Aerospace Ltd.
1270 Aberdeen St.

Hawksbury, ON K6A 1K7

ShipTo:

Customer Order #:	Date Received:	Terms:	G.S.T. #:	Ship Via:	Ship Date:
PO17897	Sep-14-2012	NET 30 DAYS	10071 6547 RT0001		Sep-18-2012

Item # Qty P/N & Description

1	12 EA	STUD	S/N 86727
		P/N D3028-1	W/O 117540

**CERTIFICATE OF
CONFORMANCE**

**CADORATH PLATING CO. LTD.
2150 LOGAN AVENUE
WINNIPEG, MANITOBA R2J-0J1**

DATE: Sep-18-2012

CONSIGNED TO: Dart Aerospace Ltd.
1270 Aberdeen St.
Hawksbury, ON K6A 1K7

W/O #: 117540

INVOICE #: 62389

**CONTRACT OR
PURCHASE ORDER #** PO17897

DESCRIPTION: STUD

QTY 12

P/N # D3028-1

S/N # 86727

(DAS)
16
2-89

12/09/00

STRIP AND CADMIUM PLATE IAW AMS-QQ-P-416C TYPE 2 YELLOW
CLASS 1. BAKE HEAT CHART # 12-966.

CERTIFICATE: I certify that the items indicated here on have
been inspected and tested and conform to all specifications
and requirements detailed on the contract or purchase order.

CI
22

Approved Inspector: